

ABSTRACT

The invention is a system and method for automatically determining a resolution of an encoder, automatically calibrating the encoder resolution, and automatically determining a length of a workpiece from the encoder resolution and encoder count. The system comprises an encoder for generating an encoder signal indicative of linear movement of a moving workpiece traveling along a path. The system also comprises a first sensor positioned along the path traveled by the workpiece, the first sensor generating a first sensor signal in response to sensing an identifying characteristic of the workpiece. The system further comprises a second sensor positioned along the path traveled by the workpiece, the second sensor generating a second sensor signal in response to sensing the identifying characteristic of the workpiece, said second sensor being positioned a known distance from the first sensor along the path traveled by the workpiece. The system also comprises a processor for determining the encoder resolution as a function of the encoder signal, the first sensor signal, the second sensor signal, and the known distance between the first and second sensors.